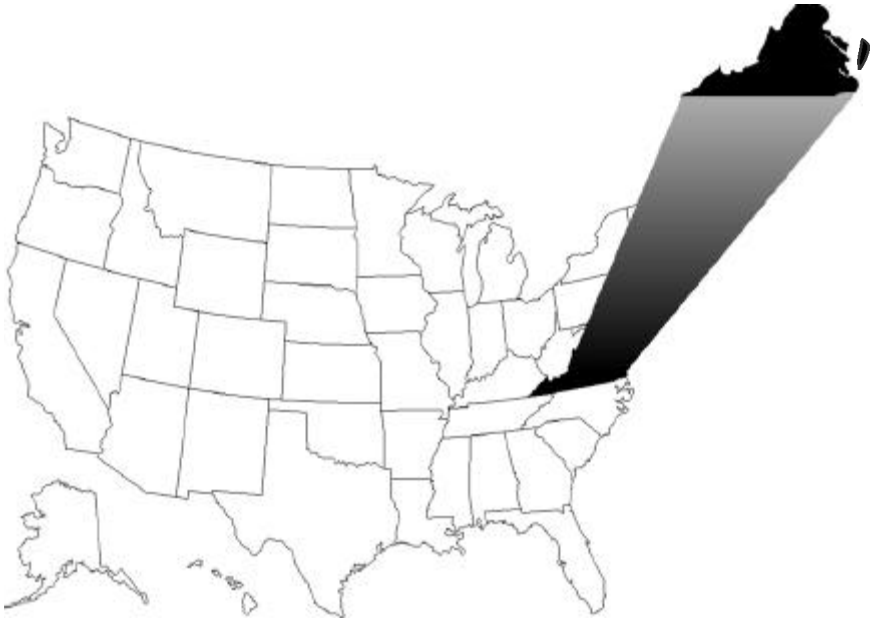
VIRGINIA STATE ASSESSMENT PROGRAM

STANFORD
ACHIEVEMENT TEST SERIES
Ninth Edition

— 2000 DETAIL REPORT —



The *Virginia State Assessment Program 2000 Detail Report* was prepared by the Virginia Department of Education, Division of Assessment and Reporting, P.O. Box 2120, Richmond, VA, 23218-2120.

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EXECUTIVE SUMMARY

During the period of September 15-October 13, 2000, the *Stanford Achievement Test* Series, Ninth Edition, Form TA, Abbreviated *(Stanford 9)* was administered to over 263,000 students throughout Virginia in grades 4, 6, and 9. This was the fourth administration of *Stanford 9* as the norm-referenced component of the Virginia State Assessment Program (VSAP)—the first administration occurred in Spring 1997 when *Stanford 9* was taken by students in grades 3, 5, 8, and 11. The second administration took place in Fall 1998, and subsequent administrations occurred during Fall semesters in 1999 and 2000.

Summary of Fall 2000 Performance

Following is a brief summary of Virginia students' Fall 2000 performance against the *Stanford 9* national average and in terms of scaled scores across the four years of VSAP (detailed in Tables 1.2 on page 6 and 1.3 on page 7):

- ✓ Virginia's Fall 2000 achievement was at or above the national average in **31** (94%) of the **33** *Stanford 9* subtests and content area totals compared to 28 (85%) in 1999.
- ✓ Achievement in grade 4 was at or above the national average in **all** 11 subtests and content area totals, and up in ten of the 11 when compared to 1999.
- ✓ In grade 6, achievement was above the national average in **ten** of the 11 subtests and content area totals. Compared to 1999, scores were up in seven subtests and totals.
- ✓ Achievement of Virginia's ninth grade students was at or above the national average in **ten** of the 11 subtests and content area totals. Compared to 1999, scores were up in six of the various subtests and content area totals.
- ✓ From 1997 to 2000, grade 4 has shown gains in performance in **all** ten subtests and content area totals for which *Stanford 9* scaled scores have been developed. From 1999, gains were again made in all 10 in 2000.
- ✓ In grade 6, the Prewriting subtest shows a slight loss over the four-year period, primarily due to a drop in 1998. When compared to 1999, gains were made in **seven** of the ten subtests and content area totals in 2000.
- ✓ In grade 9, a significant gain has continued since 1997 in Mathematics: Problem Solving, while a modest decline is seen in Mathematics: Procedures. In 2000, gains were made from 1999 in **seven** of the ten subtests and content totals.

Numbers and Percentages of Students Tested

The table below indicates the number and percentage of students tested statewide at each of the three grade levels in Fall 2000 as well as corresponding data from the previous administrations.

Table 1.1— Number / Percent of Students Tested, 1997-2000:

	Spring 1997		Fall 1998		Fall 1999		**Fall 2000**	
	Number	Percent	Number	Percent	Number	Percent	**Number**	**Percent**
grade 4 (grade 3 in '97)	81,087	95%	85,434	96%	87,411	96%	**88,021**	**96%**
grade 6 (grade 5 in '97)	81,171	96%	82,588	96%	82,963	95%	**87,358**	**96%**
grade 9 (grade 8 in '97)	78,382	95%	85,527	93%	87,857	92%	**88,568**	**92%**

Statewide Percentile Ranks

Test levels administered in Fall semesters to grades 4, 6, and 9 are the same as those administered to grades 3, 5, and 8 respectively in Spring 1997. However, Virginia's Fall semester percentile ranks are based on comparison to a Fall standardization of *Stanford 9* while the Spring 1997 percentile ranks were based on a Spring standardization. As a result, it is important to remember that a given raw score is unlikely to yield the same percentile rank in both Fall and Spring scoring. This does not affect the usefulness of percentile ranks in drawing comparisons between Virginia's achievement and the national average or comparing Virginia's achievement in a given Fall semester relative to another Fall semester (i.e., to determine growth, gain, or loss). This situation does, however, make comparison of any Fall semester percentile ranks to Spring 1997 percentile ranks—whether at the student, school, division, or state level—statistically invalid.

Regardless of the time of year at which a nationally normed test is administered, national average performance in the test's standardization always falls at the 50th percentile. Table 1.2 details the information provided in the summary on page 5, and confirms that across the three grades tested, Fall 2000 achievement was at or above the national average in **31** (94%) of the **33** *Stanford 9* subtests and content area totals compared to 28 (85%) in 1999. Because valid comparison of percentile ranks from all Fall administrations (1998 through 2000) is possible, Table 1.2 includes percentile ranks from each of those years.

The following specific points are also indicated in Table 1.2:

Table 1.2 – Fall 2000 Statewide Percentile

	***Stanford 9* level / grade tested**								
	Primary 3 / grade 4			**Intermediate 2 / grade 6**			**Advanced 2 / grade 9**		
	1998	1999	**2000**	1998	1999	**2000**	1998	1999	**2000**
Reading Vocabulary	47	49	**50**	58	59	**58**	56	57	**58**
Reading Comprehension	50	53	**53**	58	59	**59**	60	62	**62**
TOTAL READING	50	52	**53**	58	59	**59**	58	60	**60**
Mathematics: Problem Solving	57	61	**64**	64	67	**70**	58	61	**63**
Mathematics: Procedures	51	54	**55**	52	55	**58**	46	44	**42**
TOTAL MATHEMATICS	53	57	**60**	58	62	**65**	54	55	**55**
Prewriting	52	55	**56**	42	43	**43**	47	49	**50**
Composing	50	53	**54**	54	55	**56**	52	54	**54**
Editing	57	59	**62**	57	60	**62**	48	49	**50**
LANGUAGE	54	57	**60**	51	53	**55**	48	50	**51**
PARTIAL (Basic) BATTERY	53	56	**57**	58	60	**61**	55	56	**57**

The percentile ranks shown above can be used to reliably compare Virginia's 2000 achievement to that in 1998 and 1999. However, they cannot be used—if compared—to reliably determine whether Virginia students gained or lost in terms of real performance in any of these years relative to 1997 when *Stanford 9* was administered in the Spring semester. **The best available measure of change across all administrations of VSAP is the scaled score.**

Scaled Scores

Stanford 9 Fall and Spring raw score-to-scaled score conversions within each specific content area/test level combination are identical. For example, in Primary 3 Reading Vocabulary, a raw score of "X" will convert to a scaled score of "Y" for both Fall and Spring testing. This scaling system allows educators to use scaled scores in a given level of *Stanford 9* to make reliable determinations of growth or loss from one year to the next regardless of the time of year the test was administered or the grade in which the test was administered.

Additionally, each *Stanford 9* subtest and content area total features a constant scaled score range that crosses all available test levels, regardless of the grade tested or test form. This allows meaningful comparison of the achievement of a given student, school, or division—and the state as well—in a given subtest or content area total from year to year as well as over several years.

Table 1.3 below displays mean ("average") statewide scaled scores from the 1997 through 2000 VSAP administrations and confirms the information summarized on page 5:

Table 1.3 – Comparison of Mean Statewide Scaled Scores, 1997-2000

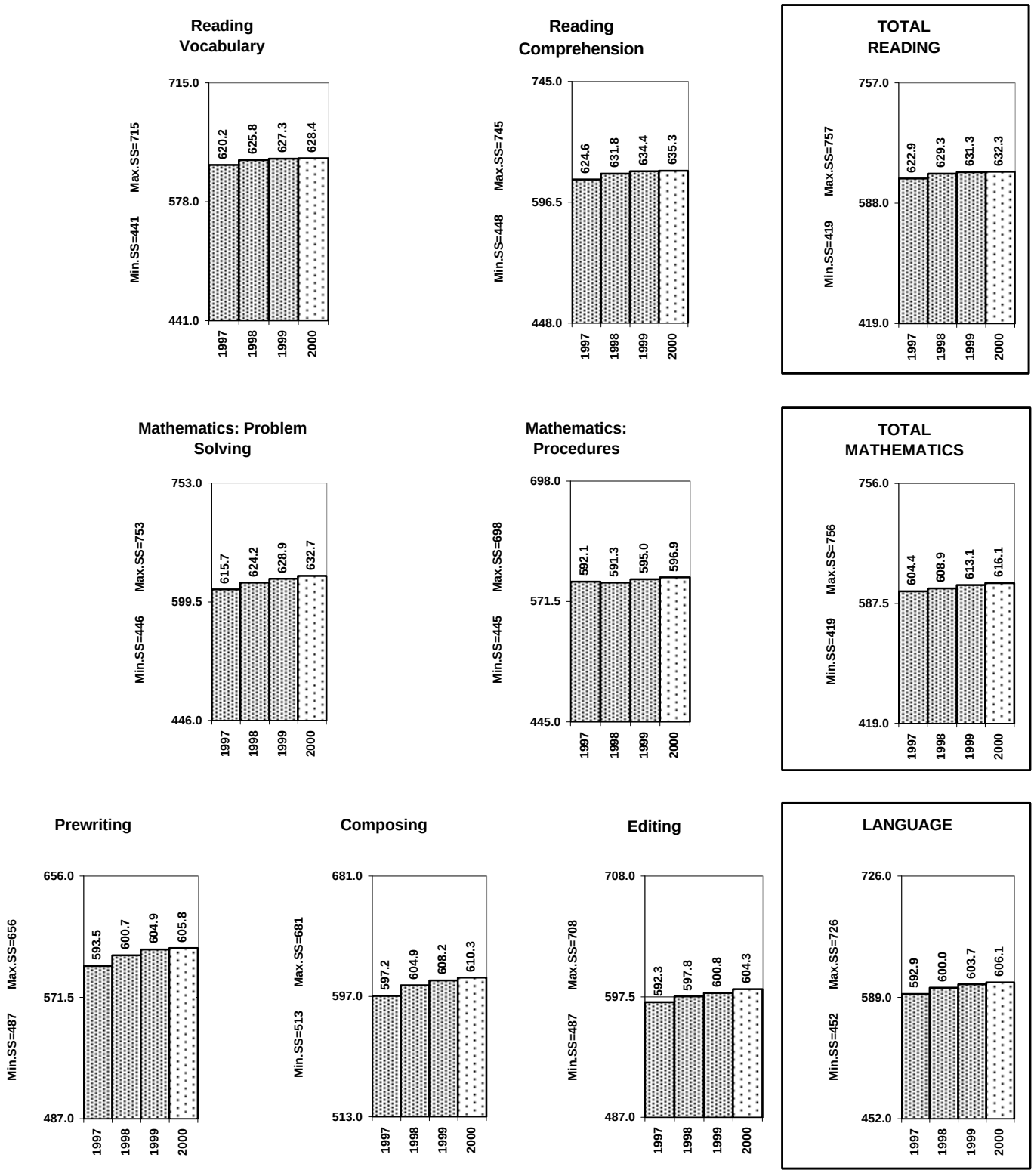
	***Stanford 9* level / grade tested**														
	Primary 3, grade 4					**Intermediate 2, grade 6**					**Advanced 2, grade 9**				
administration	1997 (gr. 3)	1998	1999	**2000**	**4-yr gain (loss)**	1997 (gr. 5)	1998	1999	**2000**	**4-yr gain (loss)**	1997 (gr. 8)	1998	1999	**2000**	**4-yr gain (loss)**
Reading Vocabulary	620.2	625.8	627.3	**628.4**	**8.2**	671.7	673.3	674.4	**673.9**	**2.2**	707.7	708.5	710.1	**710.5**	**2.8**
Reading Comprehension	624.6	631.8	634.4	**635.3**	**10.7**	664.2	665.8	667.5	**667.0**	**2.8**	701.6	700.7	702.3	**702.3**	**.7**
TOTAL READING	622.9	629.3	631.3	**632.3**	**9.4**	666.8	668.5	669.9	**669.4**	**2.6**	702.6	702.3	703.9	**704.1**	**1.5**
Mathematics: Problem Solving	615.7	624.2	628.9	**632.7**	**17.0**	658.9	662.4	665.6	**668.9**	**10.0**	679.8	686.4	689.6	**691.1**	**11.3**
Mathematics: Procedures	592.1	591.3	595.0	**596.9**	**4.8**	659.8	658.6	663.0	**666.2**	**6.4**	696.9	696.2	694.7	**692.2**	**(4.7)**
TOTAL MATHEMATICS	604.4	608.9	613.1	**616.1**	**11.7**	658.1	659.7	663.4	**666.6**	**8.5**	686.5	690.2	691.4	**691.3**	**4.8**
Prewriting	593.5	600.7	604.9	**605.8**	**12.3**	622.8	621.4	622.1	**622.3**	**(.5)**	654.6	654.7	657.1	**658.1**	**3.5**
Composing	597.2	604.9	608.2	**610.3**	**13.1**	632.7	634.8	636.4	**637.5**	**4.8**	658.1	656.8	659.4	**660.2**	**2.1**
Editing	592.3	597.8	600.8	**604.3**	**12.0**	633.1	632.9	635.4	**637.6**	**4.5**	654.0	655.7	657.3	**658.1**	**4.1**
LANGUAGE	592.9	600.0	603.7	**606.1**	**13.2**	629.5	629.7	631.5	**632.7**	**3.2**	654.5	655.2	657.4	**658.4**	**3.9**

NOTE: Scaled scores are not available for the *Stanford 9* Partial Battery.

Figures 1.4 through 1.6 on pages 8-10 indicate the entire range of scaled scores for each subtest and content area total for each of the levels of *Stanford 9* Form TA, Abbreviated administered in VSAP. Within each range, the locations of mean statewide scaled scores from the 1997 through 2000 VSAP administrations are indicated.

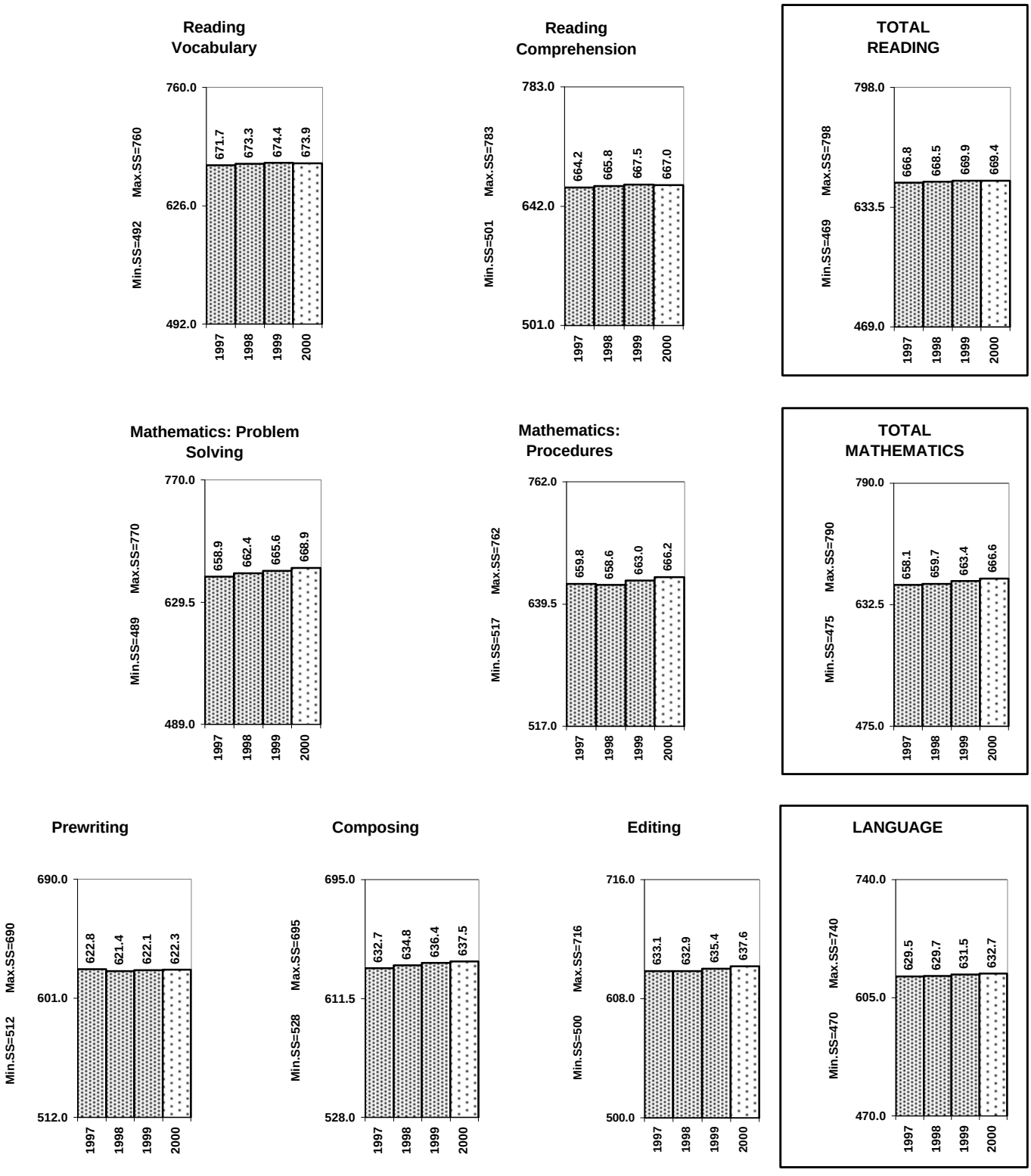
It is important to note that *Stanford 9* scaled score ranges are not the same from one subtest and/or content area to another. So, though scaled scores can be used within a given subtest or content area total to reliably compare performance from different testing cycles (e.g., Fall to Spring or year to year), they cannot be used to determine relative strength and weakness across subtests and content area totals. For example, comparison of a mean scaled score of 675 in Total Reading and a mean scaled score of 650 in Total Mathematics for sixth graders in a particular school does not necessarily indicate that the school's sixth grade students performed better in reading than in math.

Figure 1.4–Grade 4 VSAP Scaled Score Performance
Stanford 9 Primary 3, Form TA, Abbreviated



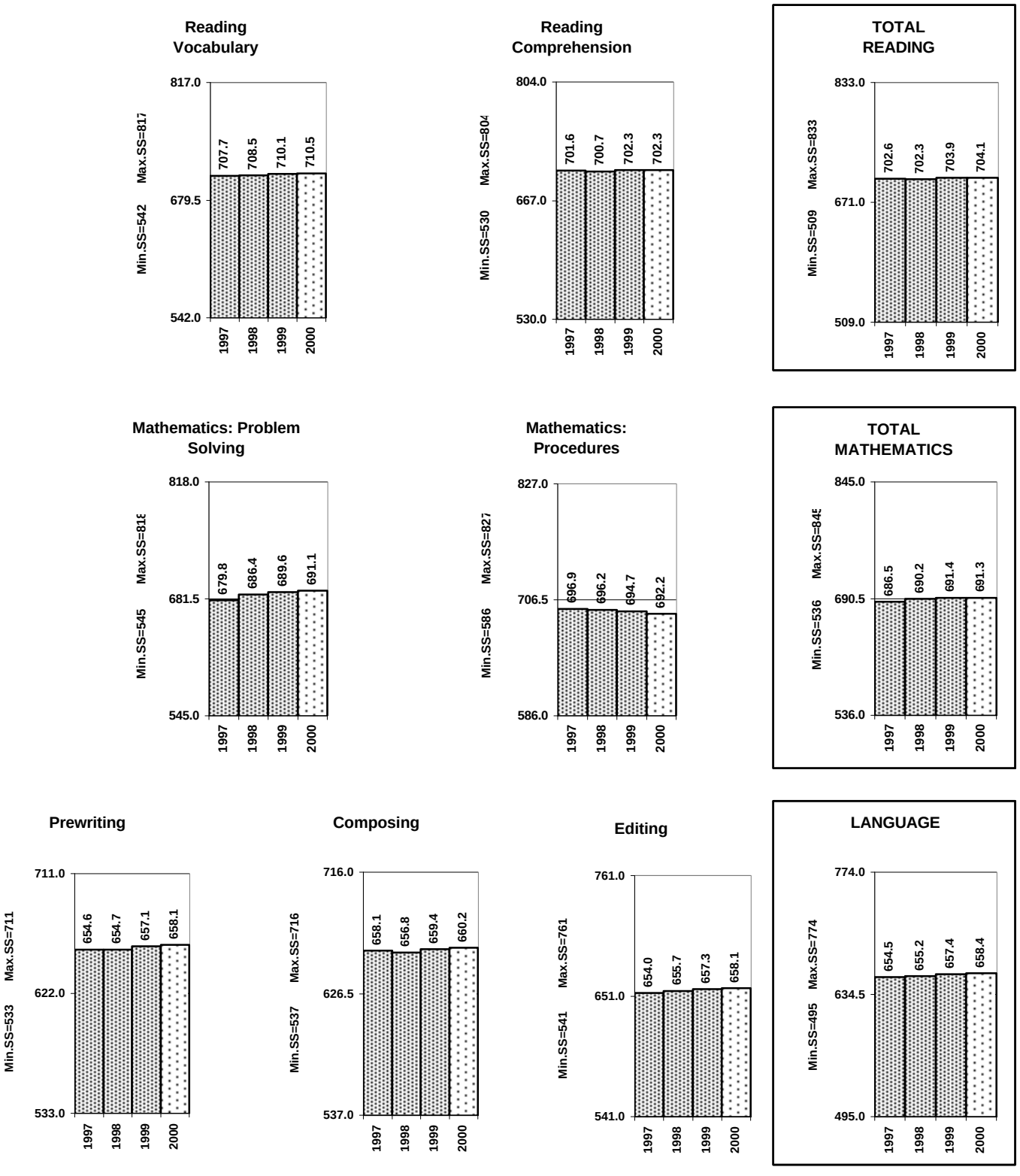
Indicated minimum and maximum scaled scores for each content area and total are those attainable at the Primary 3 level of *Stanford 9* Form TA, Abbreviated. However, because all *Stanford 9* Form TA, Abbreviated test levels are equated to the same scale, a scaled score of 600, for example, is equal to the same level of performance regardless of test level, including Intermediate 2 (grade 6) and Advanced 2 (grade 9).

Figure 1.5–Grade 6 VSAP Scaled Score Performance
Stanford 9 Intermediate 2, Form TA, Abbreviated



Indicated minimum and maximum scaled scores for each content area and total are those attainable at the Intermediate 2 level of *Stanford 9* Form TA, Abbreviated. However, because all *Stanford 9* Form TA, Abbreviated test levels are equated to the same scale, a scaled score of 600, for example, is equal to the same level of performance regardless of test level, including Primary 3 (grade 4) and Advanced 2 (grade 9).

Figure 1.6–Grade 9 VSAP Scaled Score Performance
Stanford 9 Advanced 2, Form TA, Abbreviated



Indicated minimum and maximum scaled scores for each content area and total are those attainable at the Advanced 2 level of *Stanford 9* Form TA, Abbreviated. However, because all *Stanford 9* Form TA, Abbreviated test levels are equated to the same scale, a scaled score of 600, for example, is equal to the same level of performance regardless of test level, including Primary 3 (grade 4) and Intermediate 2 (grade 6).

Achievement Summary

Overall performance

- Virginia's grade 4 achievement in 2000 was at or above the national average (50th percentile) in all subtests and totals. Relative to 1999, fourth grade scaled scores were up in all subtests and totals.
- Overall 2000 achievement in grade 6, as in 1999, was above the national average in all subtests and totals with the exception of Prewriting—2000 achievement in Prewriting was again at the 43rd percentile rank despite a slight rise in the mean scaled score (622.1 to 622.3).
- In grade 9, statewide achievement was at or above 50th percentile in ten of the eleven subtests and totals (up from eight in 1999), with Mathematics: Procedures the only the exception. Performance in Mathematics: Procedures declined in 2000 from 1999.

Subgroup performance

- Females scored higher than males in all subtests and content area totals except Mathematics: Problem Solving and Total Mathematics in grade 4, Mathematics: Problem Solving in grade 6. In grade 9, males scored as well as or higher than females in both mathematics subtests and in Total Mathematics.
- American Indian/Alaskan Native students in grade 4 scored at or above the national average in seven of the 11 subtests and content area totals. Sixth graders were at or above the national average in five of the 11 subtests and totals (up from two in 1999), while ninth graders met or exceeded the national average in Reading Comprehension and Mathematics: Problem Solving.
- In 2000—just as in 1999—Asian/Pacific Islander students exceeded the national average in all subtests and totals in grades 4, 6, and 9.
- As in 1999, Black students in grades 4, 6, and 9 scored below the national average in all subtests and content area totals in 2000.
- Hispanic students in grade 4 scored at or above the national average in eight of the 11 subtests and totals while sixth graders were at or above the national average in seven of the 11—up from four in 1999. Ninth grade Hispanic students scored at the national average only in Mathematics: Problem Solving.
- White students scored at or above the national average in 2000 on all subtests and content area totals except grade 6 Prewriting (as they did in 1998 and 1999) and grade 9 Mathematics: Procedures.
- Students with limited proficiency in English scored well below the national average in all subtests and totals as in 1999, with the following exceptions: students in grade 4 were at the national average in Mathematics: Procedures; students in grade 6 improved in all Mathematics tests and exceeded the national average in Mathematics: Problem Solving.